# *ADOPT A DRIFTER PROGRAM*

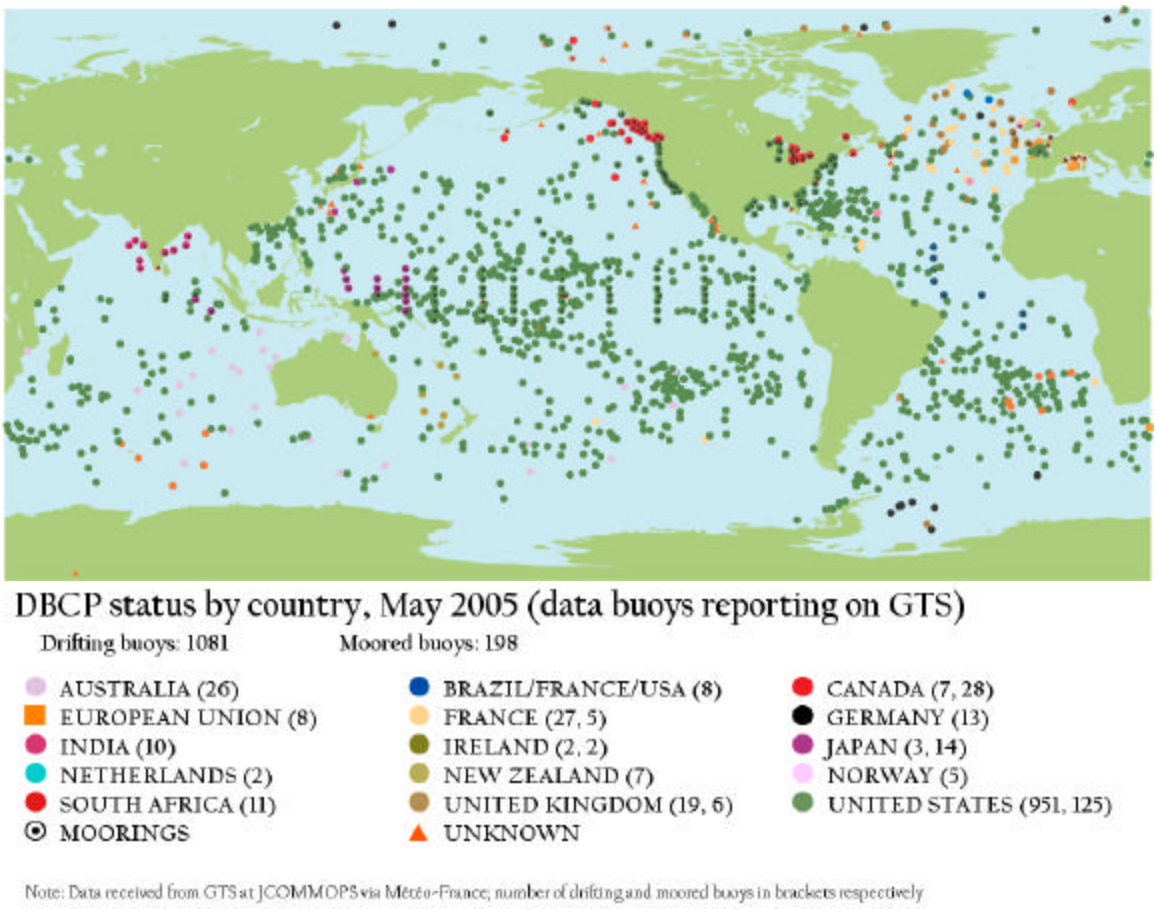
The National Oceanic and Atmospheric Administration (NOAA) Office of Climate Observation (OCO) established the ***Adopt a Drifter Program*** (ADP) in December 2004 for K-16 teachers from the United States along with international educators. This program provides teachers with an educational opportunity to infuse ocean observing system data into their curriculum. A drifting buoy (drifter) is a floating ocean buoy equipped with meteorological and/or oceanographic sensing instruments linked to transmitting equipment where the observed data are sent to collecting centers. A global array of 1250 drifting buoys is scheduled to be completed during 2005 with the official launch of the 1250$^{th}$ buoy planned at a celebration during the Joint WMO-IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM*) II conference in Halifax, Nova Scotia this September. Ongoing deployment of drifting buoys will be essential to maintain the array at its complete level.

The ADP invites one school from the United States to partner with one international school where they collaborate to mutually adopt a drifter to be deployed from a ship at sea. A teacher from each school may be on board the ship during deployment, although this is not a prerequisite for participation in the Program. An educational sticker or drawing from each school is adhered to the drifter before deployment and photos taken to document the activity. The teachers receive the WMO number of their drifting buoy in order to access data online from the school's adopted drifter. Participating teachers develop lesson plans to encourage their students to apply the drifting buoy data. Students in the teachers' classes receive a drifter tracking chart to plot the coordinates of the drifter as it moves freely in the surface ocean currents. Teachers and students can more easily make connections between the data accessed on line and other maps showing currents, winds, etc.

Since drifter data are used to track major ocean currents and eddies globally, ground truth data from satellites, build models of climate and weather patterns, predict the movement of pollutants if dumped or accidentally spilled into the sea, and assist with the forecast path of approaching hurricanes, it is important to understand how the data are measured, how often data are downloaded, and what data are available for schools and the general public to access. Students have full access to drifting buoy data (e.g., latitude/longitude coordinates, time, date, SST) in real or near real-time for their adopted drifting buoy as well as all drifting buoys deployed as part of the global ocean observing system. They can access, retrieve, and plot as a time series various subsets of data for specified time periods for any drifting buoy (e.g., SST) and track and map their adopted drifting buoy for short and long time periods (e.g., one day, one month, one year).

The Adopt a Drifter web site is http://osmc.noaa.gov/OSMC/adopt_a_drifter.html. Educators and students from all countries are invited to participate. If interested, please contact Diane Stanitski at diane.stanitski@noaa.gov.

* The WMO/IOC Joint Technical Commission for Oceanography and Marine Meteorology (JCOMM) is an intergovernmental body of experts, which provides the international, intergovernmental coordination, regulation and management mechanism for an operational oceanographic and marine meteorological observing, data management and services system.




The Data Buoy Cooperation Panel (DBCP) is an international body with a mission to coordinate deployment of drifting and moored buoys worldwide. This map, from May 2005, shows the status of the drifting and moored buoys as part of the ocean observing system. The first number in parentheses represents the number of drifting buoys deployed by that country. In May 2005, 1081 drifting buoys had been deployed, resulting in 86% completion for the drifting buoy network.

Mary Cook (on right), a middle school science teacher from Southside Middle School, Batesville, Arkansas, deployed the first adopted drifting buoy in the Pacific Ocean from the NOAA ship RONALD H. BROWN. The buoy was released off the coast of Chile in December 2004. Mary's students adopted this buoy and nicknamed it "Bob". A children's science book was written in conjunction with Mary's cruise on the RONALD H. BROWN. The book, entitled *Teacher at Sea: Miss Cook's Voyage on the RONALD H. BROWN*, highlights the scientific work conducted on board. If you are interested in receiving one of these books (free of charge), please send your request to diane.stanitski@noaa.gov.